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09/032,863 03/02/98 GRIGOR

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EXAMINER

TM02/0814

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ART UNIT

PAPER NUMBER

2674

DATE MAILED:

08/14/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Office Action Summary**

Application No.

09/032,863

Applicant(s)

GRIGOR ET AL.

Examiner

Kevin M. Nguyen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 June 2001.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24,29-33 and 38-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24,29-33 and 38-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. The amendment filed on 6/4/2001 is entered. The rejection of claims 24, 29-32, 33, 38-55 are maintained.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 24 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kou (US 5,874,928) in view of Zenda (US 5,559,525).

As to claims 24 and 29-32, Kou teaches a video graphics processing circuit 10, host computer 12 consists of a processing unit, display memory 36 and frame buffer 48 corresponding to the claimed a plurality of screen memories (figure 2), host computer 12 consists of a processing unit, video buffer 38, write buffer 45, and read buffer 50 corresponding to the claimed a digital storage medium and memory stores programming instructions (figure 2, column 4, lines 64-67), which includes host computer 12 to receive, manipulate, and store the graphics data is ready to be converted into video signals which can be used to drive the display 18a-18n CRT and LCD (figure 1, column 6, lines 20-26). It would have been obvious to a person of ordinary skill in the art to recognize that Kou discloses as recited in claims 24 (a) "receive display preferences regarding at least one of a multiple displays as claimed.

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Therefore, Kou teaches all of the claimed limitation of claim 24, except for claim 24 (b) and claim 24 (c). However, Zenda (5,559,525) teaches a portable computer control system which includes keyboard KB (figure 23A, col. 14, lines 24-32), the expansion slot of the computer corresponding to the claimed the coupling controller (see fig. 2A, 2B, col. 7, lines 34-38), the entire configuration of the computer (column 6, lines 45) corresponding to the configuration properties of the claimed. Zenda (5,559,525) teaches the first display controller 87 is incorporated (figure 3A, column 7, lines 45) and outputs display data P7-0 to be connected RAMDAC 93 and displayed on the color LCD panel 91 (figure 3A column 7, lines 46-67), the second display controller 109 outputs display data to be connected RAMDAC 111 and displayed on the color CRT display unit 107 (figure 3A, column 9, lines 13-15) corresponding to the claimed the plurality of screen memory, a first display controller 87 and a second display controller 109 (figure 3A) corresponding the claimed a plurality of display drivers. It would have been obvious to a person of ordinary skill in the art to recognize that Kou discloses as recited in claims 24 (b) and claim 24 (c) as claimed (by virtue of the operation described at col. 7, lines 31-67 to col. 8, lines 1-56). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to provide teaches a portable computer control system taught by Zenda for the host computer taught by Kou in the multiple display of Kou's system because this would allow the user to select displaying image data supplied from two or more display controllers on the flat panel display apparatus (col. 1, lines 11-14 of Zenda 5,529,525).

As to claims 33 and 38-41, refer to the previous rejections as applied to claims 24 and 29-32. It would have been obvious to a person of ordinary skill in the art to recognize that both Kou and Zenda disclose a computer control system which inherently includes a digital storage medium for storing programming instruction as recited in claim 33 "first means, second means, third means and fourth means for storing programming instructions... the plurality of screen memories" as claimed.

As to claims 42-48, refer to the previous rejections as applied to claims 24, 29-32 and 33, 38-41.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 24, 29-33 and 38-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caine.

As to claims 24 and 29-32, Caine teaches a plurality of display cards 50 corresponding to the claimed a plurality of display controllers (figure 2), the four SRAMs 22A to 22D (a plurality of screen memories) are assigned to four video channels and connected to four corresponding video drivers 24A to 24D (a plurality of display controllers) (col. 2, lines 53-55), the status register 36 corresponding to the claimed a coupling controller (col. 3, lines 7-11). Caine further teaches a host computer 10 and a keyboard 12 corresponding to the claimed a processing unit (col. 3, lines 1-6) to (a)

receive display preferences regarding at least one of a multiple displays; (b) determine whether the display preferences can be fulfilled in observance of at least one of : configuration ....fulfilled; and (c) configure the computing system .....when the current configuration can be reconfigured. Regardless of such considerations, it will be appreciated that the number of images stored, how they are sequenced and whether and how the displayed information on the screws relates from screen to screen are all under control of the host computer, more especially via the status register or registers 36 (col. 6, lines 16-21). It would have been obvious to a person of ordinary skill in the art to recognize that Caine discloses as recited in claim 24 (a), claim 24 (b) and claim 24 (c) as claimed (by virtue of the operation described at col. 2, lines 21-68 to col. 3, lines 1-68)

As to claims 33 and 38-41, Caine teaches a host computer 10 including internal memory and hard drive and floppy disc. It would have been obvious to a person of ordinary skill in the art to recognize that Caine discloses a digital storage medium for storing programming instructions of first means, second means, third means and fourth means (by virtue of the operation described at col. 2, lines 21-24).

As to claims 42-48, refer to the previous rejections as applied to claims 24, 29-32 and 33, 38-41.

As to claims 49-55, refer to the previous rejections as applied to claims 24, 29-32 and 33, 38-48. Zenda further teaches an analog switch 97 (a coupling module) receives the control signals LP, FP, PCLK, and WCLK from the first display controller 87, and outputs them when the ZENSEN signal is at high level. The output terminals of the

analog switch 97 are set in a high impedance state when the ZENSEN signal is at low level. The control signals supplied from the analog switch 97 are wired-ORed with control signals supplied from the Z connector 105, and are supplied to the color LCD controller 95 (col. 8, lines 20-27). It would have been obvious to a person of ordinary skill in the art to recognize that Zenda discloses that claim 49 recites "a coupling module coupled to the plurality of display controllers ..... a means for switching the plurality of display drivers and the plurality of display controllers to appropriate screen memory portions" as claimed.

### ***Response to Arguments***

5. Applicant's arguments filed 6/4/2001 have been fully considered but they are not persuasive.

Applicant argues that claim 24 (b) recites "the coupling controller determining .... be fulfilled." This argument is not persuasive because Caine's invention teaches "The host computer 10 can access the memory 20 via the bus 16, a multiplexer 26, an address decoder 28 and address and data buses 30, 32. The multiplexer 26 is provided to enable an optional co-processor 34 to handle the manipulation of image data in the SRAMs. The multiplexer 26 is controlled by one bit of a status register 36, which is a write only register in the computer I/O address space, e.g. address 300 (HEX), served by a decoder 38 connected to the bus 16 upstream of the multiplexer 26 (see col. 2, lines 65-68 to col. 3, lines 1-6)." These arguments are not persuasive because it would

Applicant argues that claim 49 recites "a coupling module ... screen memory portion." This argument is not persuasive because Zenda's invention teaches "an analog switch 97 (a coupling module) receives the control signals LP, FP, PCLK, and WCLK from the first display controller 87, and outputs them when the ZENSEN signal is at high level. The output terminals of the analog switch 97 are set in a high impedance state when the ZENSEN signal is at low level. The control signals supplied from the analog switch 97 are wired-ORed with control signals supplied from the Z connector 105, and are supplied to the color LCD controller 95." These arguments are not persuasive because it would have been obvious to a person of ordinary skill in the art to recognize that Zenda discloses that claim 49 recites "a coupling module coupled to the plurality of display controllers ..... a means for switching the plurality of display drivers and the plurality of display controllers to appropriate screen memory portions" as claimed.

Applicant's arguments with respect to claims 49-55 have been considered but are moot in view of the new ground(s) of rejection.

For these reasons, the rejection of claims 24, 29-32, 33, 38-55 based on Zenda, Kou, and Caine are maintained.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 form.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP



§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 703-305-6209. The examiner can normally be reached on MON-FRI from 9:00-5:00 with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A Hjerpe can be reached on 703-305-4709. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-6606 for regular communications and 703-308-6606 for After Final communications.

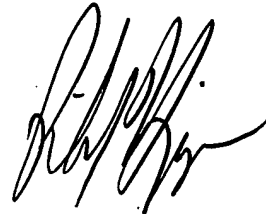
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

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Kevin M. Nguyen  
Examiner  
Art Unit 2674

KN  
July 31, 2001

A handwritten signature in black ink, appearing to read 'Richard Hjerpe', written in a cursive style.

**RICHARD HJERPE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**